#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTON COUNTY WATER DISTRICT )
NO. 1 (A) FOR AUTHORITY TO ISSUE PARITY )
REVENUE BONDS IN THE APPROXIMATE PRINCIPAL )
AMOUNT OF \$7,315,000 FOR THE PURPOSE OF ) CASE NO.
REFUNDING BOND ANTICIPATION NOTES AND FOR ) 94-056
OTHER NEEDS; AND (B) NOTICE OF AN ADJUSTMENT )
IN WATER RATES: AN INCREASE OF APPROXIMATELY )
\$1,834,000 EFFECTIVE MAY 1, 1994

#### ORDER

On March 28, 1994, Kenton County Water District No. 1 ("Kenton District") applied for authority to issue \$7,315,000 in revenue bonds and to adjust its rates to increase normalized annual water revenues by approximately \$1,834,000, or 14 percent. Kenton District subsequently amended its application to adjust its rates to increase revenues by approximately \$2,018,000, or 15 percent. By this Order the Commission authorizes the proposed bond issuance and an adjustment of rates to produce additional annual revenues of \$1,960,167 and makes significant changes in Kenton District's rate structure.

The Commission permitted the following parties to intervene:
Boone County Water and Sewer District ("Boone District"), city of
Florence ("Florence"), city of Ludlow ("Ludlow"), city of Taylor
Mill Utilities Commission ("Taylor Mill"), and city of Walton
("Walton").

The Commission suspended the proposed rates until September 30, 1994 to investigate their reasonableness. A public hearing on

Kenton District's application was held on September 13, 1994.

Parties submitted written briefs following the hearing.

#### COMMENTARY

Kenton District is a water district organized pursuant to the provisions of Chapter 74. Founded in 1926, it is the oldest and largest water district in the Commonwealth. It serves approximately 65,000 customers in a three-county area. It provides retail water service to the residents of Kenton County and wholesale water service to Boone District, Campbell County Kentucky Water District ("Campbell District"), and the cities of Bromley, Florence, Ludlow, Taylor Mill, Walton, Wilder, and Winston Park.

## PROPOSED\_FINANCING

Kenton District seeks authorization to issue \$7,315,000 in revenue bonds. The proceeds of this bond issuance will finance various construction projects<sup>1</sup> and retire bond anticipation notes in the amount of \$3,200,000, the proceeds of which were applied to those projects.

Opposing the proposed bond issuance, Florence argues that Kenton District can finance a portion of these construction projects from internal funds. It notes that Kenton District had total retained earnings of \$14,873,637 at the end of the test period. Of this amount, approximately \$6 million were unrestricted. It further argues that Kenton District had net income for the test year of \$985,337. In addition to these funds,

Kenton District's response to the Commission's Order of June 6, 1994, Item 12b.

Florence contends that Kenton District's contracts with Campbell District will generate additional revenues to finance the construction projects.

Based upon the level of evidence in the record, the Commission is unable to conclude that Kenton District has sufficient internal funds to meet its present needs. The Commission finds that the proposed bond issuance should be authorized. However, Kenton District is hereby placed on notice that in future cases, including Case No. 94-316,<sup>2</sup> Kenton District's ability to use existing funds to finance construction projects will be thoroughly scrutinized.

## TEST PERIOD

Kenton District proposed, and the Commission has accepted, the 12-month period ending December 31, 1993 as the test period for determining the reasonableness of the proposed rates. In using this historic test period, the Commission has given full consideration to appropriate known and measurable changes.

#### REVENUES AND EXPENSES

Kenton District reported test period operating income of \$3,053,736.<sup>3</sup> It proposes several adjustments to test-year operations to normalize historical operating conditions and to

Case No. 94-316, Application of Kenton County Water District No. 1(A) for Authority to Issue Parity Revenue Bonds in the Approximate Amount of \$15,120,000; (B) A Certificate of Convenience and Necessity for the Construction of a New Ohio River Pump Station at a Cost of Approximately \$13,500,000; and (C) Notice of an Adjustment of Rates: An Increase of Approximately \$1,798,440 Effective November 1, 1994.

Application of Kenton District, Exhibit G (Revised), Page 1 of 19.

reflect pro-forma changes. The Commission finds that, with the exceptions noted below, these adjustments are reasonable and in accordance with accepted rate-making principles.

# Revenues from Water Sales

Kenton District reported test year operating revenue from water sales in the amount of \$12,755,050. It proposes an adjustment of \$96,879 for new customers added during the test year. It also proposes to increase its revenue from water sales by \$5,415 to reflect income received from new customers. These adjustments result in test year operating revenues from water sales in the amount of \$12,857,344.

Florence argues that the Commission should impute additional revenues to Kenton District as a result of the its recent agreements with Campbell District. On September 27, 1988, Campbell District executed a written contract with Kenton District in which it agreed to purchase its total water requirements from Kenton District for a 20 year period. The contract was to become effective upon completion of the expansion of Kenton District's Fort Thomas Water Treatment Plant. Because of litigation over the Commission's refusal to issue a certificate of public convenience for the plant expansion, the construction did not begin until March 1993 and was not completed until December 1993.

While litigation over the Commission's refusal to issue a certificate ensued, Campbell District executed another contract with Kenton District on June 10, 1992, in which it reaffirmed the

earlier contract and agreed to begin immediately to purchase all of its water from Kenton District.

Campbell District has not complied with the contract. It currently purchases its total water requirements from the City of Newport for eight months of the year. During the summer months, it purchases 50 percent of its water from Newport and the remainder from Kenton District. In 1993 Campbell District purchased only one third of its total water requirements from Kenton District.

Florence argues that the Commission should impute to Kenton District all revenues which it would receive if Campbell District complied with the Agreement. Kenton District's proposed rates are based on the assumption that Campbell District will continue to purchase only one-third of its total water requirements from Kenton District. Citing the testimony of Kenton District's General Manager who testified that Kenton District expected Campbell District to honor the agreement and that Kenton District is considering taking action to enforce the contract, Florence argues that this assumption is erroneous and, if not corrected, will provide Kenton District with a substantial windfall. Florence further argues that Kenton District has a responsibility to enforce

If Campbell District had purchased its total water requirements from Kenton District during the test period, Kenton District would earn an additional \$323,326 in revenue.

the terms of the contract. If it fails to do so, it should bear the burden associated with that failure.

The Commission recognizes that a strong argument exists to support imputation of revenues. Kenton District expanded its Fort Thomas Water Treatment Plant primarily to serve Campbell District. As a result of Campbell District's limited usage, the facility is not being fully used. Moreover, as a result of Campbell District's limited usage, the cost of the expanded facility in terms of debt service and depreciation are being borne by present customers in greater share than their current usage dictates.

Despite these arguments, the Commission finds that no imputation of revenues should be made at this time. Considerable uncertainty exists about the validity of both contracts. Campbell District strongly disputes their validity. It has indicated its intention to continue to purchase most of its requirements from Newport. If Kenton District is successful in its efforts to enforce the contracts, however, an adjustment of rates will be required. To meet this contingency, the Commission will require Kenton District to report quarterly on the litigation's status and its sales to Campbell District.

The billing analysis filed in the case produced revenue in the amount of \$12,752,130. With the inclusion of the adjustment for new customers and revenue from water haulers, fireline, and fire

On October 22, 1994, Kenton District commenced legal action against Campbell District in Campbell Circuit Court to enforce the contracts. Kenton County Water District No. 1 v. Campbell County Kentucky Water District, No. 94-CI-01057 (Campbell Cir. Ct. filed Oct. 21, 1994).

hydrants the total revenue from water sales is \$12,780,262. The Commission finds that this amount most accurately reflects test year operating revenue from water sales.

## Rents from Water Property

Kenton District reported rental income from water property of \$3,240 for the test year. Since the end of the test year, Kenton District ceased renting water property. The Commission, therefore, has decreased rents from water property by \$3,240.

## Pension Expense

Kenton District proposed an adjustment to increase test year pension expense by \$12,177. Based on the projected increase to salary expense, this adjustment reflects six months of pension expense at Kenton District's test year contribution rate of 8.82 percent, and six months at the contribution rate of 8.77 percent which became effective July 1, 1994. The Commission finds that the expense should be based on the current contribution rate of 8.77 percent for an entire year. Accordingly, the Commission finds

Kenton District's response to the Commission's Order of June 6, 1994, Item 6.

<sup>7</sup> T.E. at 79.

that Kenton District's proposed adjustment should be denied and that test year pension expense should be increased by \$10,676.8 Security Guard Expense

During the test year Kenton District incurred expenses of \$40,757 for security guards at the Ohio River Pumping Station which were necessary due to increased vandalism. Since this expense is not expected to be incurred in the near future, the Commission has included an adjustment to decrease test-year operating expenses by \$40,757.

# Amortization Expense

Kenton District reported amortization expense of \$38,377 in its test-year operations for the amortization of rate case expenses incurred in Case No. 91-046. Rate case expenses associated with Case No. 91-046 were fully amortized during calendar year 1994.

Projected Payroll Increase
Pension Fund Contribution Rate

Pro forma Pension Expense
Less: Test Year Expense (Kenton District's
response to the Commission's Order of
August 23, 1994, Item 2)

Required Increase

\$3,069,373

8.77%

\$ 269,184

\$ 258,508

\$ 10,676

Kenton District's Response to the Commission's Order of July 1, 1994, Item 4c(1).

Case No. 91-046, Application and Notice of Kenton County Water District No. 1: (A) To issue revenue bonds in the approximate principal amount of \$16,160,000 (A portion for refunding of bond anticipation notes); (B) To construct additional plant facilities of approximately \$8,317,000; (C) Notice of adjustment of rates effective May 1, 1991; and (D) Approval, if necessary, of continuing miscellaneous long-term indebtedness (Nov. 8, 1991).

Kenton District proposes a net adjustment of (\$2,230) to reflect the estimated amortization of rate case expense for 1994. This estimate includes expenses incurred in Case No. 91-046 and the current proceeding. The Commission has decreased amortization expense by \$12,812 to represent the annual amortization of rate case expense of \$25,565<sup>11</sup> based on the actual expenses incurred in this proceeding.

## Summary

Based on the aforementioned adjustments, Kenton District's test-year operations appear as follows:

	Test Year	Commission Adjustments	Test Year Adjusted
Operating Revenues Operating Expenses	\$13,053,113 9,999,377	\$ 99,054 <u>396,341</u>	\$13,152,167 10,395,718
Operating Income	\$ 3,053,736	(\$297,287)	\$ 2,756,449
Other Income Other Deductions	349,653 71,633	93,531 <u>9,791</u>	443,184 81,424
Income Available for Debt Service	\$ 3,331,756	( <u>\$213,547</u> )	\$ 3,118,209

Total Rate Case Expense
Less: Portion expensed in 1993 annual report
Total Rate Case Expense to be amortized
Amortization Period
Annual amortization expense

\$ 82,373

5,677

\$ 76,696

+3 yrs.
\$ 25,565

## REVENUE REQUIREMENT DETERMINATION

The Commission finds Kenton District's annual revenue requirement to be \$15,555,518.<sup>12</sup> To achieve a level of income sufficient to meet its reasonable expenses and debt service, the Commission further finds that Kenton District's rates should be adjusted to produce additional annual revenues of \$1,960,167.<sup>13</sup>

## COST OF SERVICE STUDY AND RATE DESIGN

In Case No. 91-046 the Commission ordered Kenton District to submit with its next application for general rate adjustment a comprehensive cost of service study which used an American Water Works Association approved methodology. Kenton District has submitted such study, but ignored the study's recommendations in designing new rates.

The cost of study uses the base-extra capacity methodology. 14
Under this methodology, costs of service are generally separated
into base costs, extra capacity costs, customer costs, and direct
fire-protection costs. Base costs tend to vary with the total

12	Adjusted Operating Expenses Average Annual Debt Service (1995 - 1999) 20% Debt Service Coverage Less: Bond Procurement Income Other Expense	\$10,395,718 4,470,514 894,103 286,241 81,424
	Total Revenue Requirement	<u>\$15,555,518</u>
13	Total Revenue Requirement Less: Adjusted Operating Revenues Other Income	\$15,555,518 13,152,167 443,184
	Revenue Increase Required	\$ 1,960,167

For a complete description of the base-extra capacity methodology, see American Water Works Association, <u>Water Rates: AWWA Manual M1</u> (4th ed.).

quantity of water used for a constant or average annual rate of use. These costs include operation and maintenance expenses of supply, treatment, pumping and distribution facilities.

Extra capacity costs are costs incurred with meeting rate of use requirements in excess of the average and include operation and maintenance expenses and capital costs for system capacity required for above average usage.

Customer costs are costs associated with serving customers regardless of the amount of water used. These include meter reading and billing and other administrative expenses as well as the maintenance and capital costs related to meters and services.

Fire protection costs are costs directly related to fire protection. Kenton District's cost of service study did not include a separate cost component for fire protection. Since fire service is not a significant function of Kenton District, this exclusion is consistent with accepted rate making practices.

Kenton District contends that the base-extra capacity methodology represents a significant departure from the methodology which the Commission has used previously. It further contends that acceptance of the cost of service study's recommendations will create cost shifts among the customer classifications and will increase the rates of Kenton District's wholesale customers by as much as 139 percent. It proposes to disregard the study's recommendations and simply increase all rates by approximately 15 percent.

Kenton District's wholesale customers also object to the study's recommendations. They maintain that Kenton District's current cost of service study is flawed because of incorrect allocation of certain expense, the study's failure to consider the individual wholesale customer's location on Kenton District's system, and the lack of any data on the peaking factors of Kenton District's commercial and industrial customers.

These wholesale customers also object to the proposed meter maintenance charge. Noting that such charge cannot be passed through their purchase water adjustment clauses, they contend the proposed charge is unfair to wholesale customers. Walton argues that, as the proposed meter maintenance charge is not a utility rate and directly interferes with its existing contract with Kenton District which requires Kenton District to operate and maintain Walton's meter at its own expense, the Commission lacks the authority to order such charge.

Finally, the intervenors maintain that the cost of service study rates do not comply with the principles of revenue continuity and stability. If the Commission chooses to implement the cost of service study recommendations, they argued, equity demands that the rates be phased in gradually.

The rate design recommended by the cost of service study significantly differs from Kenton District's present rate design. Kenton District currently has a declining block rate design with a minimum usage allowance of 600 cubic feet for all retail customers. Its wholesale rates range from \$0.65 to \$1.22 per 1,000 gallons.

All customer classifications, except wholesale customers, pay the same minimum bill amount for a 600 cubic foot usage allowance.

The cost of service study recommends a fixed service charge based on meter size with a usage allowance of 600 cubic feet for all customers. The number of rate increments for retail customers is decreased from five steps to four steps. All wholesale users with the exception of Campbell District would pay a uniform rate per 1,000 gallons and a service charge depending on the size and number of meters. Campbell District would pay a flat rate per 1,000 gallons.

The Commission's review of the cost of service study indicates that several technical adjustments are required. First, the fixed service charge was improperly computed. In determining the fixed service charge, the size of each meter is multiplied by a meter and service ratio to determine the number of 5/8 inch equivalent meters. Once the charge is determined for a 5/8 inch connection, this charge is then multiplied by the meter and service ratio to determine a charge based on meter size.

In Kenton District's cost of service study, the fixed service charge was determined by dividing the revenue needed to cover the water allowance and customer costs by the total number of 5/8 inch monthly equivalent units. The meter sizes were then multiplied by the appropriate 5/8 inch meter equivalent ratio to determine the fixed charge. While the wholesale customer will be charged a fixed service charge, no water allowance was included in the water cost for those customers. The Commission has determined that all meters

should be allowed the 600 cubic feet water allowance in the service charge. It is unfair to include the cost of the 600 cubic feet usage allowance in the total fixed charge and then multiply by the meter equivalent ratio. This results in customers with larger size meters paying more for the 600 cubic feet usage allowance than those with a 5/8 inch connection.

To determine the water allowance portion of the fixed service charge, the total cubic feet included in the usage allowance was multiplied by the unit base cost of \$0.73 per 100 cubic foot to determine the revenue necessary to recover the minimum usage allowance. The revenue amount was then divided by the number of bills rendered to produce a quarterly rate of \$5.15 per meter regardless of size. The remaining customer costs were divided by the number of 5/8 inch equivalent bills to produce a fixed service charge of \$10.75 for a 5/8 inch meter. The allowance for 600 cubic feet plus the fixed service charge results in a total fixed service charge of \$15.90 for a 5/8 inch meter.

In determining the fixed service charge for meters larger than 5/8 inch, the rate of \$10.75 was multiplied by the 5/8 inch meter equivalent ratio. The water allowance of \$5.15 was then added to the result to ensure that all users pay the same for the minimum usage allowance. The adjustments made to the fixed service charge calculation and the inclusion of the wholesale minimum allowance result in the 5/8 inch and 3/4 inch meter sizes paying a higher rate and the larger meters paying a lesser rate than the rates set out in the cost of service study filed by Kenton District.

The fixed service charge is designed to recover the cost of meter reading, billing, collecting and customer accounting as well as capital related costs associated with the service line and meter. While Kenton District has contracts with some wholesale customers which places responsibility for meter maintenance upon Kenton District, fairness dictates that Kenton District's rates produce revenues as near to the cost of service as possible. Moreover, KRS 278.040 and 278.200 clearly provide the Commission with the authority to establish such charge. 15

Other adjustments to the cost of service study have been made. The study allocated both depreciation and maintenance of hydrants to expenses associated in meeting maximum hour demand. It also allocated a portion of GIS mapping expenses to wholesale customers. The Commission has reallocated these expenses away from wholesale customers. Adjustments have been made to remove other costs incorrectly allocated to wholesale customers.

As to the study's failure to consider the location of wholesale customers, the Commission notes that the base-extra capacity methodology does not consider customer location as a factor. Adjustments, however, were made to exclude the costs associated with small water mains - those which are 10 inches or smaller.

See Simpson County Water District v. City of Franklin, Kentucky, Ky., 872 S.W.2d 460 (1994); Jefferson County Bd. of Education v. William Dohrman, Inc., Ky.App., 620 S.W.2d 328 (1981).

The Commission finds that full implementation of the cost of service study's recommendations, as adjusted herein, would not be in the best interest of Kenton District's customers. The maximum day load factors for the residential, commercial and industrial user classes are only estimates. The maximum hour load factor for all user classes, except Campbell District, was also only estimated. Both estimates may skew the results of the study. The Commission is also concerned that full implementation of the study's recommendations may adversely affect wholesale customers. A more gradual approach towards cost based rates is necessary to avoid unplanned and unexpected revenue shifts and is clearly in the public's best interest.

To reduce the rate impact on the wholesale customers, the Commission has adjusted the last rate increment in the retail classification to \$0.80 per 100 cubic feet to ensure that Kenton District's unit base cost of \$0.73 per 100 cubic feet is recovered. Minor changes have also been made to the other rate increments.

These adjustments adequately address wholesale customer concerns about the allocation of certain costs. The redistribution of revenues will mitigate any flaws in the cost of service study. The rates granted herein should remain the basis for rate design until the next cost of service study is performed.

#### TARIFF REVISION

Kenton District has proposed revisions to its collection procedures to decrease the time from billing to discontinuance of service from 80 to 46 days. Kenton Districts proposes to send a

shut-off notice 36 days after billing. After reviewing the proposed tariff, the Commission finds that the proposed change is in accordance with 807 KAR 5:006, Section 14(1)(f)2, and should be approved.

#### SUMMARY

After review of the evidence of record and being otherwise sufficiently advised, the Commission finds that:

- 1. The proposed issuance of \$7.315 million in revenue bonds is for the lawful objects within Kenton District's corporate purposes, is necessary and appropriate for and consistent with the proper performance by Kenton District of its service to the public, and will not impair its ability to perform that service.
- 2. The rates in Appendix A, which is attached hereto and incorporated herein, are the fair, just and reasonable rates for Kenton District and will produce annual revenues of \$15,555,518 based on adjusted test-year sales.
- 3. The rates proposed by Kenton District are unjust and unreasonable and should be denied.
- 4. Kenton District's proposed revision to its collection procedures should be approved.
- 5. Kenton District should no longer submit quarterly financial statements as required by the Commission's Order of November 8, 1991. In lieu of such reports, Kenton District should submit written reports quarterly on the status of its litigation with Campbell District and on any significant changes in the purchase patterns of its wholesale customers.

6. Kenton District should file with its next application for general rate adjustment a cost of service study which uses a methodology approved by the American Water Works Association.

#### IT IS THEREFORE ORDERED that:

- 1. Kenton District is authorized to issue revenue bonds in the principal amount of \$7.315 million. The proceeds of this issuance shall be used only for the lawful purposes specified in Kenton District's application.
  - 2. The rates proposed by Kenton District are hereby denied.
- 3. The rates set forth in Appendix A are approved for service rendered by Kenton District on and after October 1, 1994. Kenton District's proposed revision to its collection procedures is approved.
- 4. Within 20 days of the date of this Order, Kenton District shall file with the Commission revised tariff sheets setting forth the rates approved herein.
- 5. Kenton District shall refund the revenues collected in excess of the rates determined appropriate herein plus interest at a rate of 5.51 percent, the average of the 3-month commercial paper rates for October 1994.
- 6. The refund shall be made by either direct payment or bill credit and shall be made within 60 days of the date of this Order.
- 7. Within 30 days of the date of the refund is completed, Kenton District shall file with the Commission a summary statement showing a reconciliation of customer billings and the amount refunded.

8. Ordering Paragraph 11 of the Commission's Order of November 8, 1991, is vacated.

9. Beginning with the 3-month period ending April 30, 1995, and continuing for each 3-month period thereafter, Kenton District shall submit within 20 days of the close of that period a report on the status of its litigation with Campbell District and on any significant changes in the purchasing patterns of its wholesale customers.

10. Kenton District shall submit with its next application for general rate adjustment a cost of service study which uses a methodology approved by the American Water Works Association.

Nothing contained herein shall be deemed a warranty or finding of value of securities or financing authorized herein on the part of the Commonwealth of Kentucky or any agency thereof.

Done at Frankfort, Kentucky, this 27th day of January, 1995.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

ATTEST:

Executive Director

#### APPENDIX A

# APPENDIX TO AN ORDER TO THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 94-056 DATED 1/27/95

The following rates and charges are prescribed for the customers in the area served by the Kenton County Water District. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of the Commission prior to the effective date of this Order.

#### MONTHLY RETAIL RATES

First	200	cubic	feet	Fixed Service Charge
Next	1,300	cubic	feet	1.53 per 100 cubic feet
Next	163,500	cubic	feet	1.31 per 100 cubic feet
Over	165,000	cubic	feet	.80 per 100 cubic feet

## QUARTERLY RETAIL RATES

First	600 cubio	: feet	Fixed	l Ser	rvice	e Charg	је
Next	3,900 cubic	: feet	1.53	per	100	cubic	feet
Next	490,500 cubic	: feet	1.31	per	100	cubic	feet
Over	495,000 cubic	: feet	.80	per	100	cubic	feet

Customers in Sub-District A shall be assessed a monthly surcharge in the amount of \$19.22

Customers in Sub-District B shall be assessed a monthly surcharge in the amount of \$24.00.

## WHOLESALE RATES

\$1.28	per	1,000	gallons
1.28	per	1,000	gallons
1.16	per	1,000	gallons
1.28	per	1,000	gallons
1.28	per	1,000	gallons
1.28	per	1,000	gallons
1.28	per	1,000	gallons
1.28	per	1,000	gallons
	1.28 1.16 1.28 1.28 1.28	1.28 per 1.16 per 1.28 per 1.28 per 1.28 per 1.28 per	\$1.28 per 1,000 1.28 per 1,000 1.16 per 1,000 1.28 per 1,000 1.28 per 1,000 1.28 per 1,000 1.28 per 1,000 1.28 per 1,000

All customers shall pay a fixed service charge for each meter from which service is delivered. A minimum usage allowance of 200 cubic feet for customers who are billed monthly and 600 cubic feet for customers who are billed quarterly shall be included in each fixed service charge assessed.

# FIXED SERVICE CHARGES

Meter	<u>Size</u>	Monthly Charge	<b>Ouarterly Charge</b>		
5/8	Inch	\$ 5.30	\$ 15.90		
3/4 1	Inch Inch	7.09 10.68	21.28 32.03		
1 1/2	Inch	19.63	58.90		
2	Inch	30.38	91.15		
3	Inch	55.47	166.40		
4	Inch	91.30	273.90		
6	Inch	180.88	542.65		
8	Inch	288.38	865.15		
10 12	Inch Inch	449.63 592.97	1,348.90 1,778.90		